

SG10KTL-M/SG12KTL-M

String Inverter



High Yield

- Max. efficiency 98.6 %, European efficiency 98.1 %
- 2 MPP Trackers, compatible with different PV orientation design



Easy O&M

- String current monitoring function for fast trouble shooting
- Compact design and light weight for easy installation, can be installed by one person



Saved Investment

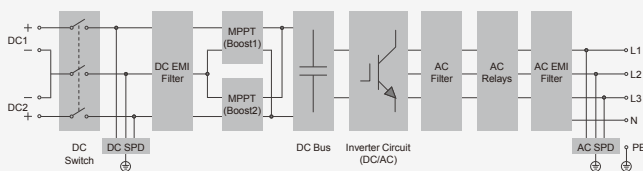
- Integrated both DC and AC SPD, low system cost
- Max. DC/AC ratio up to 1.2



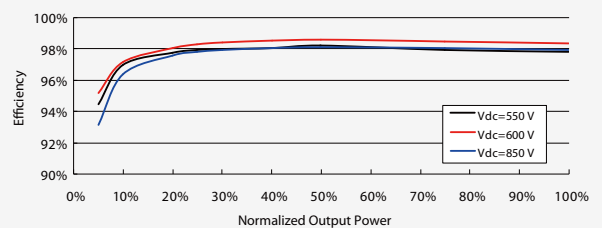
Grid Support

- Compliance with CE, IEC 62109-1/-2, G59/3, VDE 0126-1-1/4105
- Active & reactive power control, power ramp rate control

Circuit Diagram



Efficiency Curve



Input (DC)

	SG10KTL-M	SG12KTL-M
Max. PV input voltage	1100 V	
Min. PV input voltage / Startup input voltage	200 V / 250 V	
Nominal input voltage	600 V	
MPP voltage range	200 – 950 V	
MPP voltage range for nominal power	470 – 850 V	550 – 850 V
No. of independent MPP inputs	2	
Max. number of PV strings per MPPT	1	
Max. PV input current	22A (11 A / 11 A)	
Max. current for input connector	12 A	
Max. DC short-circuit current	24 A (12 A / 12 A)	

Output (AC)

Nominal AC power (at 45 °C)	10000 W	12000 W
Max. AC output power at PF=1 (at 45 °C)	10000 W	12000 W
Max. AC apparent power (at 45 °C)	10000 VA	12000 VA
Max. AC output current	15 A	18 A
Nominal AC voltage	3 / N / PE, 230 / 400 V	
AC voltage range	270 – 480 V	
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz	
THD	< 3 % (at nominal power)	
DC current injection	< 0.5 % I _n	
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases	3 / 3	

Efficiency

Max. efficiency / Euro. efficiency	98.6 % / 98.1 %
------------------------------------	-----------------

Protection

DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch / AC switch	Yes / No
DC fuse	No
PV string current monitoring	Yes
Overvoltage protection	DC Type III / AC Type III

General Data

Dimensions (W*H*D)	370*485*160 mm
Weight	20 kg
Isolation method	Transformerless
Degree of protection	IP65
Night power consumption	< 2 W
Operating ambient temperature range	-25 to 60 °C (> 45 °C derating)
Allowable relative humidity range (non-condensing)	0 – 100 %
Cooling method	Natural cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display / Communication	LED, Bluetooth + APP / RS485
DC connection type	MC4 (Max. 6 mm ²)
AC connection type	Plug and play connector (Max. 6 mm ²)
Compliance	CE, VDE0126-1-1/4105, EN62109-1/-2, G59/3
Grid support	Active & reactive power control and power ramp rate control
Type designation	SG10KTL-M-10 SG12KTL-M-10

